



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,621	03/16/2004	Richard J. Hinrichs	8474-PA01	2936
27111	7590	02/25/2008		
GORDON & REES LLP 101 WEST BROADWAY SUITE 1600 SAN DIEGO, CA 92101			EXAMINER BROOKS, KRISTIE LATRICE	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 02/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/801,621

**Applicant(s)**

HINRICHS ET AL.

**Examiner**

Kristie L. Brooks

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Status of Application***

1. Claims 1-37 are pending.
2. Receipt and consideration of Applicants remarks/arguments submitted on November 23, 2007 is acknowledged.
3. Upon further consideration by the Examiner, New grounds of Rejections have been made.

***Withdrawn Rejections***

4. The rejection of claim 7 under 35 U.S.C. 112, second paragraph has been withdrawn in light of Applicant's amendment filed on November 23, 2007.
5. The rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734) in view of Weber et al. (US 5,163,247).has been withdrawn in light of Applicant's amendment filed on November 23, 2007.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. The rejection of claims 1-2, 4-7, and 9-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734) **is maintained** for reasons set forth below.

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

**Determination of the scope and content of the prior art  
(MPEP 2141.01)**

Pommer et al. teach a process for combating fungi in agriculture by employing the plant *Reynoutria sachalinensis* (see the entire article, especially the abstract and column 1 lines 4-5). The plant *Reynoutria sachalinensis* has good fungicidal action on fungi which cause damage in agriculture (see the entire article, especially column 1

lines 60-62). The use of *Reynoutria sachalinensis* is particularly interesting from combating mildews, for example in cucurbits, ornamentals and vegetables (see the entire article, especially column 1 lines 62- 64). The plant can be converted into conventional formulations such as solutions, emulsions, suspensions, powders etc. (see the entire article, especially column 2 lines 3-10). The formulations generally contain from 0.1 to 95 wt% of plant or plant extract (see the entire article, especially column 2 lines 59-61). These formulations are prepared in conventional manner, e.g. by mixing the plant with extenders, liquid, liquefied gases under pressure and/or solid carriers, with or without the use of surfactants (see the entire article, especially column 2 lines 11-15). Water may be used as an extender and suitable surfactants include non-ionic and anionic emulsifiers (see the entire article, especially column 2 lines 15-16 and 40-41). The surfactants are employed in amounts of 0.1 to 30 wt% (see the entire article, especially column 2 lines 47-49). The formulations may also contain latex polymers, such as polyvinyl alcohol and polyvinyl acetate (see the entire article, especially column 2 lines 50-53). The formulations or various applications forms of the plant may be mixed with other, active ingredients such as bactericides, insecticides, herbicides, growth regulators, plant nutrients, and fungicides (See the entire article, especially column 2 lines 62-67). Application of the formulations is in the conventional manner, e.g. watering, spraying, sprinkling, etc and for the treatment of plant parts (i.e. leaves, seedlings), the plant concentration in the application forms may vary within a wide range, but are generally from 2 to 0.1 wt% (see the entire article, especially column 3 lines 1-13 and examples 1-5).

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

Pommer et al. do not teach an exemplified formulation of maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, as claimed by Applicant. Pommer et al. do not teach the concentration of the polymer latex whereas Applicant claims the polymer latex present in a concentration of 3%-30% of said composition.

**Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a formulation comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water.

One of ordinary skill in the art would have been motivated to do this because Pommer et al. teach the plant *Reynoutria sachalinensis*, which has good fungicidal action on fungi, in formulations useful for combating mildews, for example in cucurbits, ornamentals and vegetables. The plant may be formulated with water, surfactants, latex polymers and other active ingredients such as bactericides, plant nutrients, and

fungicides. Pommer et al. do not suggest the concentration of the latex polymer use, however, it would be obvious to one of ordinary skill in the art, due to process optimization, in which one of ordinary skill in the art would have to determine what concentration would be effective to achieve successful results. Pommer et al. do not teach the composition being applied to cut plants, however, one of ordinary skill would be motivated to apply the composition to cut plants with a reasonable expectation of success because Pommer et al. suggest the composition being applied to plant parts. With regards to the recitation, maintaining or prolonging the appearance of a floral or foliage display in claims 30 and 34, it is the Examiner's position that since the method steps taught in the prior art and the instant invention as claimed are the same, i.e. the same composition is being applied to the surfaces of plants parts, maintaining or prolonging the appearance of a floral or foliage display in claims 30 and 34; and whereby following application said display retains an appearance substantially the same as its appearance at the time of said application over a prolonged period of time or the service life of said display is extended for a prolonged period of time, said service life comprising maintenance of an acceptable appearance of said display without significant onset of wilting in claim 34, would be met by such application to the plant. Therefore, the claimed invention would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

***Response to Arguments***

Applicant's arguments filed on November 23, 2007 have been fully considered but they are not persuasive.

Applicant argues that (1) Pommer et al. discloses a material which could possible serves as an "antifungal agent" ingredients which may optionally be in Applicants nutrient/protectant component, (2) that Pommer et al. provides no disclosure of the overall composition or the significance of the claimed components, and (3) that Pommer et al. teaches away from Applicant's composition because Pommer et al. mentions ingredients that if used in Applicants composition, would destroy Applicants composition for its floral preserving purposes.

First, the Examiner wants to point out that Applicants instant composition encompasses a very broad scope of ingredients that can be utilized for maintaining and prolonging the appearance of a floral or foliage display. Pommer et al. is directed toward combating fungi in plants, ornamentals, etc. using the plant *Reynoutria sachalinensis* as the main active ingredient. The plant is known to have good fungicidal action on fungi which causes damage in agriculture. Thus, it would have been obvious to one of ordinary skill to use the composition taught by Pommer et al. because the plant *Reynoutria sachalinensis* protects plants from damage caused by the fungi. Applicant also argues that any antifungal function is optional in the instant composition. The Examiner agrees that having antifungal action in the instant composition is optional, however there are a myriad of active ingredients with various "optional" functions that



can serve as a nutritional/protectant components in the instant composition and the use of the plant *Reynoutria sachalinensis* as a nutrient/protectant is within the scope of the instant composition.

Applicant argues Pommer et al. provides no disclosure of the overall composition or the significance of the claimed components. However, Pommer et al. does suggest the use of the instant composition. Pommer et al. does not provide an exemplified formulation of all claimed components, but all the instant components are all known and disclosed in Pommer et al. for use in compositions for protecting plants from fungi. Thus, it would be obvious to one of ordinary skill to combine the instant components into a composition to protect plants from damage caused by fungi.

Applicant argues that Pommer et al. teaches away from Applicant's composition because Pommer et al. mentions ingredients that if used in Applicants composition, would destroy Applicant's composition for its floral preserving purposes. The Examiner first directs Applicant's attention to the instant claims utilizing "comprising" language which is open-ended and allows for other materials to be incorporated into instant composition. Moreover, Pommer et al. provides different ingredients that can be added to the composition depending on how the composition will be formulated. Applicant argues that Pommer et al. mentions some ingredients that would be detrimental to their instant composition. The Examiner notes that the ingredients listed are just examples of some materials that can be used and are not required in Pommer et al. compositions. No one single composition will work for every type of plant or fungi or condition at hand

and thus, one of ordinary skill would reasonably formulate a composition with varying ingredients suitable to the intended use.

8. The rejection of claims 8 under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734) in view of Smith et al. (US 6,133,300) **is maintained** for reasons set forth below.

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

**Determination of the scope and content of the prior art**  
**(MPEP 2141.01)**

Pommer et al. teach a process for combating fungi in agriculture by employing • the plant *Reynoutria sachalinensis* (see the entire article, especially the abstract and column 1 lines 4-5). The plant *Reynoutria sachalinensis* has good fungicidal action on fungi which cause damage in agriculture (see the entire article, especially column 1 lines 60-62). The use of *Reynoutria sachalinensis* is particularly interesting from combating mildews, for example in cucurbits, ornamentals and vegetables (see the entire article, especially column 1 lines 62- 64). The plant can be converted into conventional formulations such as solutions, emulsions, suspensions, powders etc. (see the entire article, especially column 2 lines 3-10). The formulations generally contain

from 0.1 to 95 wt% of plant or plant extract (see the entire article, especially column 2 lines 59-61). These formulations are prepared in conventional manner, e.g. by mixing the plant with extenders, liquid, liquefied gases under pressure and/or solid carriers, with or without the use of surfactants (see the entire article, especially column 2 lines 11-15). Water may be used as an extender and suitable surfactants include non-ionic and anionic emulsifiers (see the entire article, especially column 2 lines 15-16 and 40-41). The surfactants are employed in amounts of 0.1 to 30 wt% (see the entire article, especially column 2 lines 47-49). The formulations may also contain latex polymers, such as polyvinyl alcohol and polyvinyl acetate (see the entire article, especially column 2 lines 50-53). The formulations or various applications forms of the plant may be mixed with other, active ingredients such as bactericides, insecticides, herbicides, growth regulators, plant nutrients, and fungicides (See the entire article, especially column 2 lines 62-67). Application of the formulations is in the conventional manner, e.g. watering, spraying, sprinkling, etc and for the treatment of plant parts (i.e. leaves, seedlings), the plant concentration in the application forms may vary within a wide range, but are generally from 2 to 0.1 wt% (see the entire article, especially column 3 lines 1-13 and examples 1-5).

Smith et al. teach a broad spectrum antimicrobial composition comprising a mixture of benzisothiazolin-3-one, or a salt thereof (BIT) and 1,3-bis (hydroxymethyl)-5,5-dimethylhydantoin (DMH) (see the entire article, especially the abstract). The antimicrobial compositions are suitable to protect against the growth of microorganisms

Art Unit: 1617

such as fungi (see the entire article, especially column 1 lines 1-25; column 3 lines 10-30). The BIT used was Troysan TM 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene) (see the entire article, especially page 5 lines 24-35).

**Ascertainment of the difference between the prior art and the claims**

**(MPEP 2141.02)**

Pommer et al. do not teach the use of the nutrient/protectant component, Troysan TM 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), as claimed by Applicant.

**Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a formulation comprising a polymer latex, Troysan TM 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), a coating adjuvant component and the balance water.

One of ordinary skill in the art would have been motivated to do this because Pommer et al. teach the plant *Reynoutria sachalinensis*, which has good fungicidal action on fungi, in formulations useful for combating mildews, for example in cucurbits, ornamentals and vegetables. The plant may be formulated with water, surfactants, latex polymers and other active ingredients such as bactericides, plant nutrients, and

fungicides. Pommer et al. do not suggest the use of Troysan TM 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), however, Troysan TM 586, is a known antimicrobial used to protect against microorganisms such as fungi as suggested by Smith et al. Therefore one of ordinary skill in the art would be motivated to use Troysan TM 586 because it is an obvious variation of a bactericide or fungicide useful within compositions with antifungal/antimicrobial properties. Thus, the claimed invention would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

### ***Response to Arguments***

Applicant's arguments filed on November 23, 2007 have been fully considered but they are not persuasive.

Applicant argues the rejection of record because (1) merely adding Smith et al. antibiotic to Pommer et al. antifungal does not overcome the failure of Pommer et al. to teach Applicants' overall composition, nor overcome Pommer et al. contrary teaching that in many of its embodiments that the Pommer et al. composition (and thus also the Pommer et al./Smith et al composition) would be detrimental to protection of floral materials, and therefore not useful.

The merits of prior art reference Pommer et al. have been discussed above and Applicants arguments were not found to be persuasive. Smith et al. is drawn to antimicrobial compositions comprising mixtures comprising Troysan® 586 ( 2-

benzisothiazolin-3-one (BIT) and propylene) for treating against a variety of microorganisms including fungi. The composition has been found to have unexpected and synergistic results and is effective as a broad spectrum antimicrobial preservative. Thus it would have been obvious to use 2-benzisothiazolin-3-one (BIT) and propylene in the compositions taught by Pommer et al. because of its effectiveness at combating microorganism such as fungi.

***New Grounds of Rejections***

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 4-6 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 and 18 recite "a concentration in order of 3%-30% of said composition." It is unclear as to what quantitative expression of concentration Applicant is referring to. For example, it is unclear if the 3-30% is a concentration referring to a mass-volume (w/v) percentage, mass percentage (w/w), or a volume-volume percentage (v/v).

For purposes of examination, the 3%-30%, 3%-10% and 4%-8% will be interpreted to encompass any quantitative expression of concentration.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-7,9-21,23-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Polovina (US 4,783,342).

Polovina discloses methods of preserving plants, vegetables, fruits or cut flowers by applying a polymeric film coating, which controls water loss, to the surface of the plants (see the entire article especially the abstract, column 1 lines 6-12 and claims 1-21). The film is formed by applying an acrylic latex (e.g. Unocal 76 Res 2131 latex) containing a water soluble polymer to the plant and allowing the composition to dry (see the entire article, especially column 2 lines 12-26). The composition preferably contains 0.1 to about 3% of a surfactant (coating adjuvant) and preferably contain 0.2 to about 3% of an antimicrobial agents(nutrient/protectant) such as methyl or propyl p-hydroxybenzoate (see the entire article, especially column 2 lines 36-48 and claim 3). The film will contain less than 10% of water (see the entire article, especially column 3 lines 28-30).

**Example 2**

Example 2 discloses a plant treating composition containing 200 parts of Unocal 76 Res 2131 latex (~4.8% by weight concentration), 195 parts deionized water, 13.5 parts of Ulasein 15 solution, 0.8 parts Surfonyl TG-E surfactant and 2 parts Methyl

Paraben preservative (methyl p-hydroxybenzoate). One part of the volume concentrate was mixed with 10 to 15 parts by volume water to form a film coating composition.

The following tests were run using the coating composition of Example 2:

-A number of indoor decorative plants that are maintained in the laboratory and several office areas have been spray drenched with the coating composition of Example 2. These plants that were usually watered once a week, or at worst once every two weeks, have now been observed without any watering for up to three months, and some up to four months. The plants look healthy, and because of the latex coating have an attractive surface gloss.

-Cut flowers were dipped into the coating composition of Example 2, and the coating preserved them much longer than they would have been preserved had they not been coated.

-Green bananas were sprayed with the coating composition of Example 2, and the weight loss of the bananas during storage was reduced compared to bananas that were not coated. In addition the ripening process of the coated bananas was accelerated by the coating and the appearance of the bananas was improved by the coating.

-Field tests of the coating composition of Example 2 showed improved yield of apples and plums, freeze protection of tomatoes, protection of tomatoes and peppers from heat, and frost protection of Hibiscus. When used in combination with liquid fertilizers on tomatoes, self supporting tomato plants



Art Unit: 1617

resulted, requiring no stakes.

(See the entire article, especially all the Examples and more specifically Example 2 in column 6).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polovina (US 4,783,342) in view of Smith et al. (US 6,133,300).

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a

Art Unit: 1617

coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display. Applicant also claims a method for maintaining or prolonging the appearance of a floral or foliage display comprising applying a composition comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

#### **Determination of the scope and content of the prior art**

##### **(MPEP 2141.01)**

The disclosure of Polovina (US 4,783,342) is set forth above in the 102(b) rejection. Specifically, Polovina teaches methods of preserving plants, vegetables, fruits or cut flowers by applying a polymeric film coating, which controls water loss, to the surface of the plants.

#### **Ascertainment of the difference between the prior art and the claims**

##### **(MPEP 2141.02)**

Polovina does not teach specific use antimicrobial/antifungal agent 2-benzisothiazolin-3-one (BIT) and propylene. This deficiency is cured by the teachings of Smith et al.

Smith et al. teach a broad spectrum antimicrobial composition comprising a mixture of benzisothiazolin-3-one, or a salt thereof (BIT) and 1,3-bis (hydroxymethyl)-5,5-dimethylhydantoin (DMH) (see the entire article, especially the abstract). Benzisothiazolin-3-one, or a salt thereof (BIT) has found a wide use in applications because it is effective as broad spectrum antimicrobials preservatives (see the entire article, especially column 2 lines 24-27). The antimicrobial compositions are suitable to protect against the growth of a broad spectrum of microorganisms such as fungi or bacteria and can be used in a variety of applications such as in coating formulations (see the entire article, especially column 1 lines 1-25; column 3 lines 10- 30). The BIT used was Troysan® 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene) (see the entire article, especially page 5 lines 24-35).

### **Finding of prima facie obviousness**

#### **Rational and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use Troysan® 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene) in the instant composition.

One of ordinary skill in the art would have been motivated to do this because Polovina suggest the use of antimicrobials preservatives for use in film coating compositions. Although Polovina does not suggest the use of Troysan® 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), it would have been obvious to one of

Art Unit: 1617

ordinary skill in the art to incorporate Troysan® into the instant composition because of the enhanced protection against a broader spectrum of microorganisms provided to the plants. Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

### ***Conclusion***

14. This action is non-final.
15. No claims are allowed.
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie L. Brooks whose telephone number is (571) 272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

/SREENI PADMANABHAN/  
Supervisory Patent Examiner, Art Unit 1617